Docket # C1039/7058; Title: Use of Nucleic Acids
Containing Unmethylated CpG Dinucleotide
Adjuvant; Inventors: Davis et al.

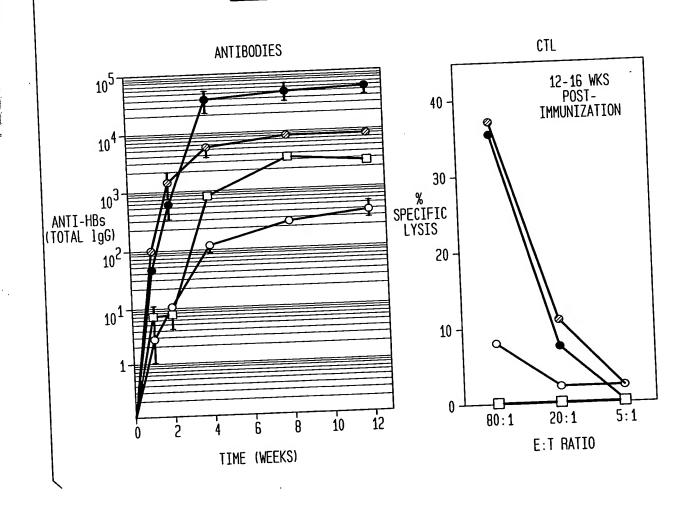
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FIG. 1

CpG ODN, ALONE OR COMBINED WITH ALUM AUGMENT HBsAg-SPECIFIC HUMORAL AND CTL RESPONSES IN ADULT BALB/c MICE

1 µg rHBsAg

- + CpG ODN + alum
- □ + alum
- O NO ADJUVANT



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FIG. 2

IMMUNOSTIMULATORY CpG ODN AS AN ADJUVANT FOR HBV VACCINE: EFFECT OF DOSE IN BALB/c MICE

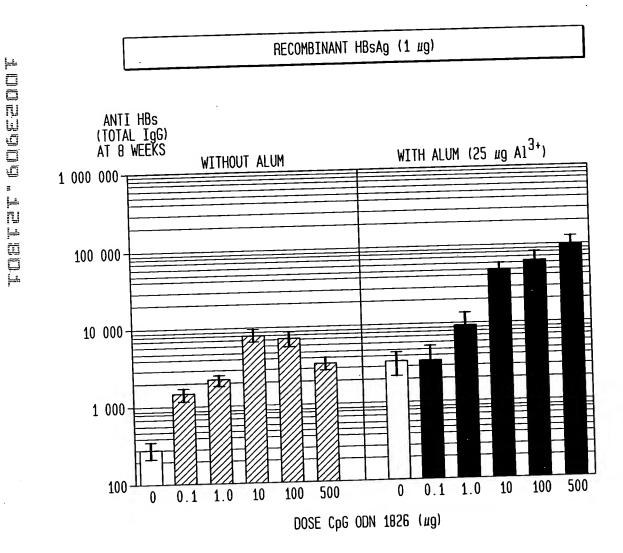
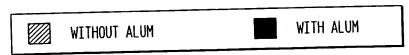
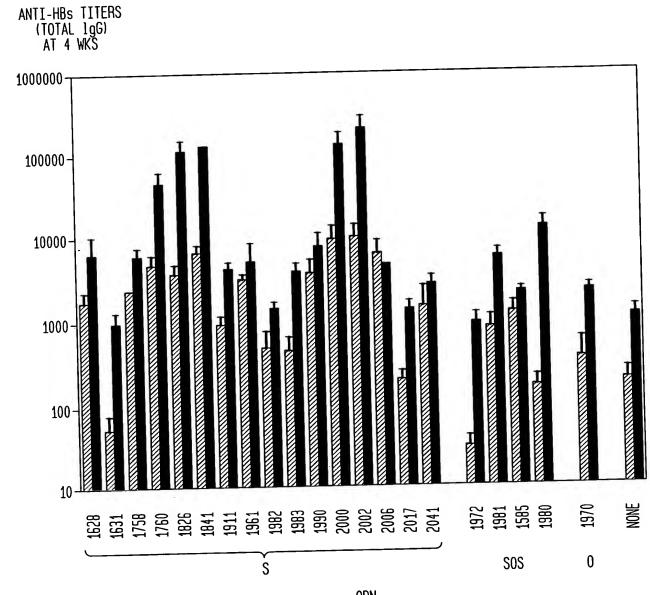


FIG. 3
HUMORAL RESPONSES AGAINST HBsAg IN BALB/c MICE WITH
DIFFERENT CpG ODN 1 µg rHBsAg + 10 ODN



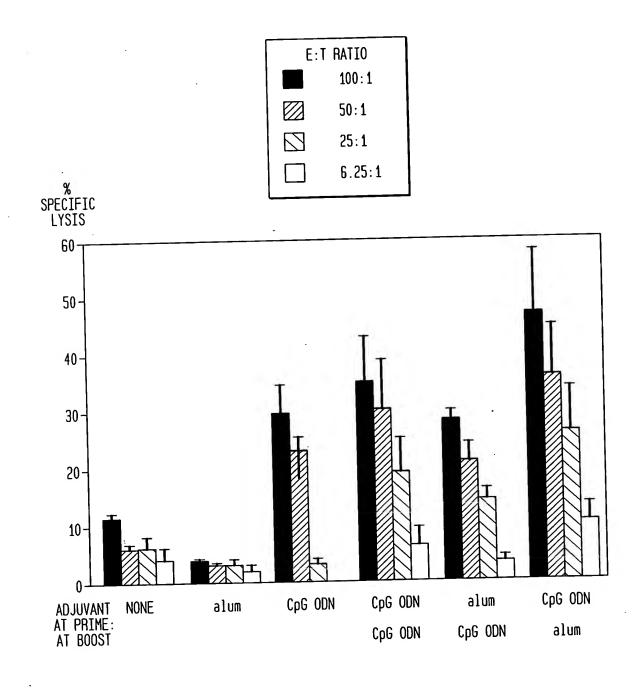


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FIG. 4

CTL RESPONSES IN BALB/c MICE WITH CpG ODN AND/OR ALUM AS ADJUVANT IN PRIME-BOOST STRATEGIES



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FIG. 5

COMPARISON OF DIFFERENT ADJUVANTS FOR IMMUNIZATION OF BALB/c MICE AGAINST rHBsAg

HBsAg (1µg) +	
ALUM	25 µg
CpG ODN	10 µg
MPL	50 µg
FCA	1:1 v/v

NUMBERS ABOVE BARS ARE RATIO OF lgG2a:lgG1 WHERE A NUMBER > 1 INDICATES A Th1-TYPE RESPONSE

NUMBERS ON BARS ARE NUMBER-FOLD INCREASE OVER HBsAg ALONE FOR ANTI-HBs TOTAL 1gG

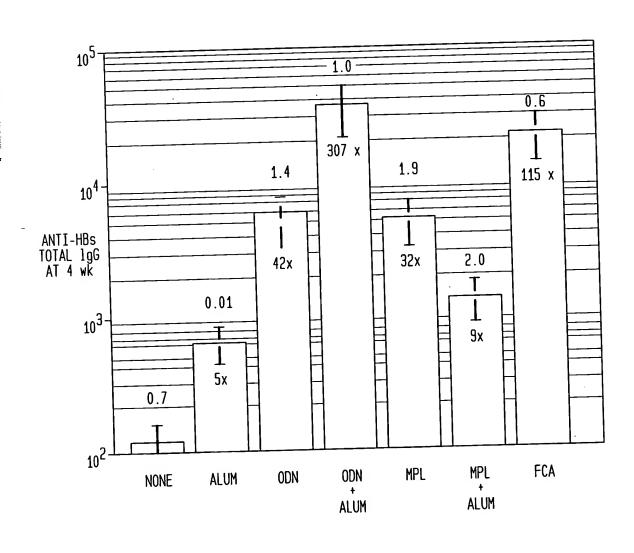
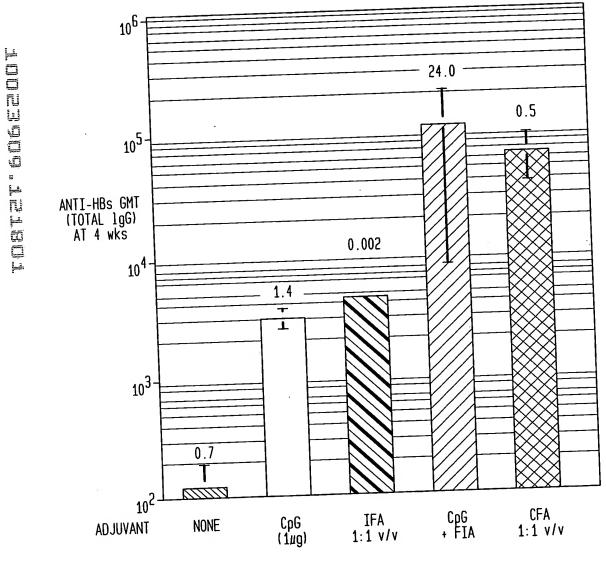
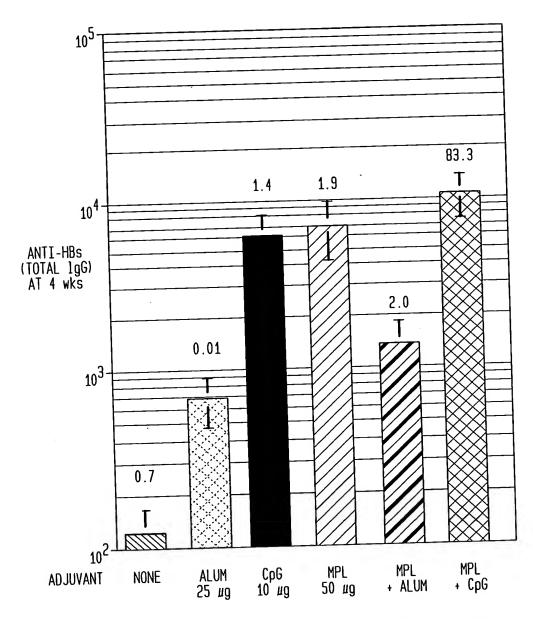


FIG. 6
1 µg HBsAg IN BALB/c MICE



<sup>\*</sup> THE NUMBER ABOVE EACH BAR IS RATIO OF IgG2a/lgG1

FIG. 7 1 µg HBsAg IN BALB/c MICE



<sup>\*</sup> THE NUMBER ABOVE EACH BAR IS RATIO OF IgG2a/lgG1

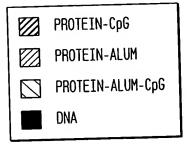
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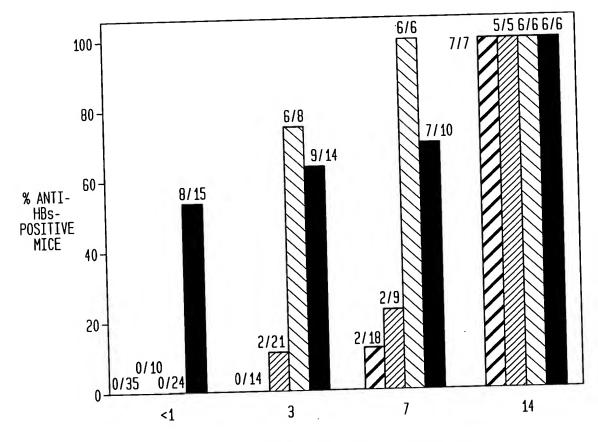
Adjuvant; Inventors: Davis et al.

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FIG. 8

## SEROCONVERSION IN NEONATAL MICE WITH DIFFERENT IMMUNIZATION STRATEGIES



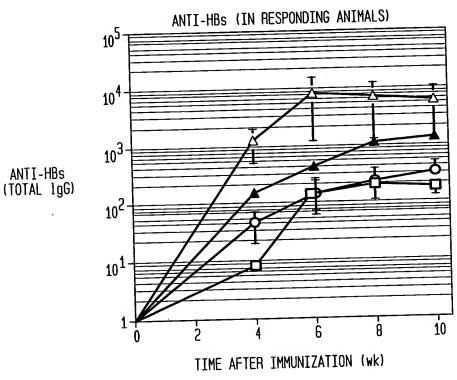


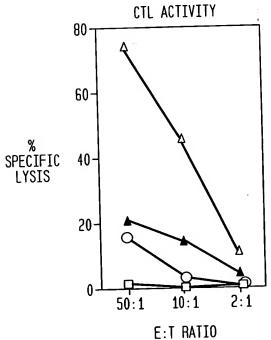
AGE AT IMMUNIZATION (DAYS FOLLOWING BIRTH)

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IMMUNIZATION OF 7-DAY OLD BALB/c MICE AGAINST HBsAg DNA VS PROTEIN VACCINE AND EFFECT OF ADJUVANT





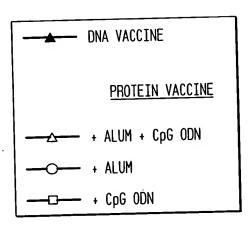


FIG. 10

DNA VS PROTEIN IMMUNIZATION IN NEONATAL (7 DAY OLD) BALB/c MICE

EFFECT OF ADJUVANT ON AB ISOTOPE

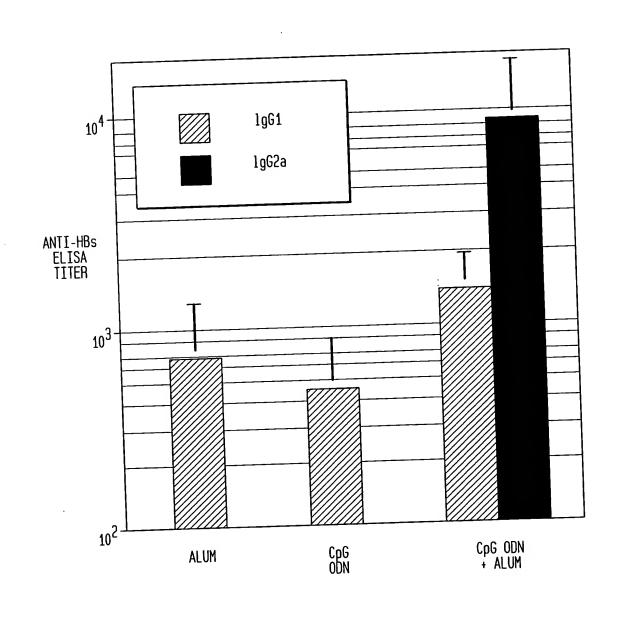
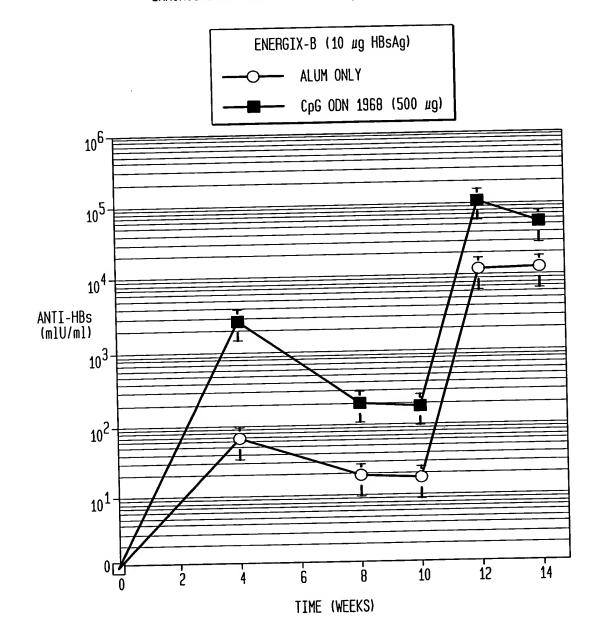


FIG. 11

IMMUNIZATION OF CYNOMOLGUS MONKEYS AGAINST HBsAg IMMUNOSTIMULATORY EFFECT OF CpG ODN WITH ENERGIX-B®



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FIG. 12

